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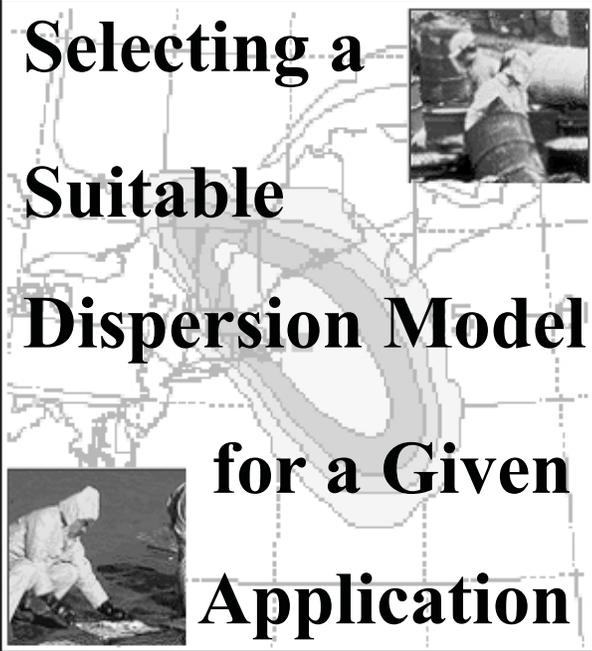
OFCM



OFFICE OF THE FEDERAL COORDINATOR FOR
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

PROCEEDINGS OF THE WORKSHOP ON EFFECTIVE EMERGENCY RESPONSE

Selecting a
Suitable
Dispersion Model
for a Given
Application



December 5-6, 2001
Crystal City, Virginia

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PROCEEDINGS
OF THE
WORKSHOP ON
EFFECTIVE EMERGENCY RESPONSE
Selecting a Suitable Dispersion Model for a Given Application

December 5-6, 2001

Crowne Plaza Washington National Airport
Crystal City, Virginia

Washington, DC
May, 2002

FOREWORD

The Workshop on Effective Emergency Response was held December 3-5, 2001 at the Crowne Plaza Washington National Airport Hotel, Crystal City, Virginia. The theme of the Forum was “*Selecting a Suitable Dispersion Model for a Given Application.*” A cross-section of nearly 90 people participated in the workshop, including representatives of the government, private, academic, and other sectors. The workshop was sponsored by the Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM).

The purpose of the workshop was to address issues associated with the number and variety of atmospheric transport and diffusion (ATD) models existing today in the federal government. In particular, participants considered what models should be used in particular situations and how those models are evaluated.

The overarching goal of the workshop was to *define a framework for supporting the objective determination of the most appropriate dispersion model to be used in a given situation.* To achieve this goal, the following objectives were pursued:

- Selection of categories to be used for screening dispersion models for application in a given scenario.
- Development of appropriate criteria within the selected categories to be used for objective screening of models.
- Introduction of processes and discussion of critical issues relating to model evaluation.

This document summarizes the proceedings of the workshop, captures the recommendations of the breakout sessions and panels, and summarizes the issues and actions that were addressed and proposed at the workshop.

I wish to extend my deepest appreciation to the panelists, moderators, rapporteurs, and attendees whose lively involvement, interaction, discussion, and interest made this workshop a success.

Samuel P. Williamson
Federal Coordinator for Meteorological Services
and Supporting Research

PROCEEDINGS
of the
Workshop on
Effective Emergency Response

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Selection of Screening Categories for Models: Model Uncertainty Mr. John S. Irwin, <i>NOAA Meteorologist, EPA Office of Air Quality Planning and Standards, Air Quality Modeling Group</i>	2-2
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Selection of Screening Categories for Models: NRC Perspective
Dr. Stephen McGuire, *Incident Response Operations, Nuclear
Regulatory Commission* 2-6

BREAKOUT SESSION

Session: Development of Standard Criteria within the Screening Categories

Group 1: Planning 3-1

Co-Chairs:

Mr. John S. Irwin, *EPA Office of Air Quality Planning and Standards,
Air Quality Modeling Group*

Dr. Darryl Randerson, *Director, Special Operations and Research
Division, NOAA/Air Resources Laboratory*

Group 2: Response 3-5

Co-Chairs:

Dr. Walter Bach, *Army Research Office*

Mr. Paul Bryant, *Insurance and Mitigation Division, Federal Emergency
Management Agency*

Group 3: Recovery 3-8

Co-Chairs:

Mr. James Fairbent, *Office of Emergency Management, Department
of Energy*

Ms. Jocelyn Mitchell, *Office of Research, Nuclear Regulatory
Commission*

PANEL DISCUSSION

Panel 2: Evaluation of Models

Moderator: Dr. David Rogers, *Director, Office of Weather and Air
Quality, Office of Oceanic and Atmospheric Research* 4-1

Department of Defense Lieutenant Colonel Jerry A. Glasow, USA
*Assistant to the Deputy Assistant Secretary of Defense for Chemical
and Biological Defense* 4-3

Department of Energy Dr. Jim Ellis, *Lawrence Livermore National
Laboratory, Department of Energy* 4-4

Environmental Protection Agency Mr. John S. Irwin, *NOAA
Meteorologist, EPA Office of Air Quality Planning and Standards,
Air Quality Modeling Group* 4-5

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Summary and Next Steps Col Judson E. Stailey, USAF, <i>Assistant Federal Coordinator for Air Force and Army Meteorological Affairs, Office of the Federal Coordinator for Meteorological Services and Supporting Research</i>	5-1
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